

Question	Answer
13.	$x = 4.2$; $JL = 14.2$; $MN = 13$
14.	$x = 3\frac{7}{11}$; $UV = 13$; $WZ = 14\frac{7}{11}$
15.	1770 ft
17.	$y = 14.3$; $HL = 24.3$; $NL = 27$
18.	$x = 11.5$; $PT = 13.5$; $PR = 9$
19.	$2\sqrt{21}$
21.	$4\sqrt{10}$
22a.	14.4 cm
22b.	24.4 cm
24.	$x = 9$; $y = 2\sqrt{13}$
27.	Solution B is incorrect. The first step should be $AC \cdot BC = DC^2$, not $AB \cdot BC = DC^2$.
30.	Yes; $PR \cdot PQ = PT \cdot PS$, and it is given that $PQ = PS$. So $PR = PT$. Subtracting the \cong segments from each of these shows that $\overline{QR} \cong \overline{ST}$.

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31.	Method 1: By the Secant-Tangent Product Thm., $BC^2 = 12 \cdot 4$ and so $BC = \sqrt{48} = 4\sqrt{3}$. Method 2: Because line tangent to $\odot \rightarrow$ line \perp to radius, $\angle ABC$ is a rt. \angle . By the Pyth. Thm., $BC^2 + 4^2 = 8^2$. Thus $BC^2 = 64 - 16 = 48$ and $BC = 4\sqrt{3}$.
32a.	6.9 cm
32b.	9.9 cm
32c.	1.97 cm
33.	B
34.	F
35.	$CE = ED = 6$ and by the Chord—Chord Product Thm., $6 \cdot 6 = 3 \cdot EF$. So $EF = 12$, $FB = 15$, and the radius AB must be 7.5.